Math 102 Syllabus

Alex Manchester (they/them)

Spring 2022

Office: Herman Brown 40 (in the basement, exit the stairs/elevators, turn left, turn left again, and it is on the right)
Email: Alex.Manchester@rice.edu
Office Hours: M 12-1pm, F 3-4pm (During office hours, I will be available to answer questions about the material in class and on the homework. It is also a time when you are welcome to talk to me about anything going on in your life, academically or otherwise.)
Course Meeting Times: MWF 9-9:50am, January 10-April 22

Note: The first two weeks of this class will be entirely over Zoom at the following link: https://riceuniversity.zoom.us/j/97417999296?pwd=akxJeDRVMUJwZVdhMHZxd0NpUWMwQT09.

After the first two weeks, we will meet in Herman Brown 227.

Description: Continuation of MATH 101. Includes further techniques of integration, as well as infinite sequences and series, Taylor polynomials and Taylor series, parametric equations, arc length, polar coordinates, complex numbers, and Fourier polynomials. Should not be taken if student already has credit for MATH 211, MATH 212, or MATH 221, without permission. Mutually Exclusive: Cannot register for MATH 102 if student has credit for MATH 106.

Textbook: OpenStax Calculus, Volume 2
A free legal PDF of this textbook is available here: https://openstax.org/details/books/calculus-volume-2 You are **not** required to purchase a physical copy of the book.

Rough Outline of topics

Using section numbers from the textbook (though there area few things we will cover that are not in the book):

Week 1: 1.5-1.7
Week 2: MLK Day on Monday, 3.1-3.3
Week 3: 3.4, Asymptotics
Week 4: 3.7, 5.1
Week 5: 5.2, 5.3, Midterm on Wednesday (2/9, 7-9pm), Spring Recess on Friday
Week 6: 5.4
Week 7: 5.5, 5.6
Week 8: 6.3
Week 9: 6.1, 6.2
Spring Break (3/14-18)
Week 10: 6.4, Complex Numbers
Week 11: Fourier Series, Midterm on Thursday (3/31, 7-9pm)
Week 12: 7.1, 7.2
Week 13: 7.3
Week 14: 7.4
Final Exam

We almost certainly won't follow this outline exactly, so please only use it to get a general sense of how the course will progress.

Homework/Extension policy

Problem sets will be assigned and due weekly on Wednesdsays. Until we are assigned a grader, problem sets will be entirely or almost entirely on WebWorK, though I may assign a few conceptual problems that I will grade. Afterwards, each problem set will have some WebWorK problems and some written problems.

Every student in the class is entitled to one no-questions-asked week-long extension. Moreover, when computing your final homework grade, I will entirely drop the two lowest grades. If you have extenuating circumstances that make these accommodations insufficient (e.g. an illness lasting longer than 2 weeks), please talk to me about it and I will do my best to come to a reasonable arrangement.

Grading breakdown

Homework: 37%
Exams: 63%
Your exam grade will be computed according to one of the following schemes, whichever gives you the highest grade:

Midterm 1:	20%	16%	20%
Midterm 2:	20%	20%	16%
Final:	23%	27%	27%

The aim in Math 102 is that letter grades should not depend on whether a student's section

is an "easy" or "hard" section. To that end, when computing final course grades, a student's exam scores are normalized against exam scores of all students in Math 102 this semester (not just those in this section), while a student's non-exam scores are normalized against the non-exam scores of students in this section. In particular, students should not assume that having higher raw scores on homework than on exams will necessarily increase their final letter grade.

General Comments

- I understand that there may be any of a variety of issues in your life, both academically and otherwise. You are under no obligation to share personal details with me, but please to feel free to come talk to me about anything that may be going on in your life. I am happy to listen, help however I can, and point you towards resources that might be helpful.
- I will almost always reply to emails by the end of the day after the day they were sent, and often sooner. If I do not reply within 48 hours, feel free to email me again.
- I would prefer you address me simply as "Alex." If it makes you more comfortable, I am also fine with "Mx. Manchester." (I am a graduate student, and in particular I do not (yet) have a Ph.D. nor am I a professor, so neither "Dr. Manchester" nor "Prof. Manchester" is accurate.)

Feedback and Suggestions

I am always interested in student feedback and suggestions. Ultimately, this class is for you, and you are the only person with direct experience of what helps you learn. If there is anything about the class that you would like to be different, you can email me or send a message anonymously through this form: https://forms.gle/d6GKqPvauTHq2CVA6. I cannot guarantee that I will make suggested changes for a variety of reasons, including Rice policy, my workload, and the desires of other students, but I will endeavor to make any reasonable changes that will help you learn.

Honor Code

Between the time the first person begins taking their exam and the time the last person finishes taking their exam, you may not contact anyone (including people not taking the class) about any part of the exam, including general facts such as chapters covered or topics to study. Any such discussion is an honor code violation.

For homework, you are encouraged to work together, and may compare your work and answers freely with others. However, you should write up you solutions yourself, and simply copying another students answer is an honor code violation.

If you have any questions about the Honor Code for this class, or are wondering if a certain course of action is acceptable, please send me an email before you assume something. It is advisable for you to save this email or otherwise keep track of it, as it could be considered as evidence if an Honor Code accusation is made against you. Ignorance of the Honor Code is not an excuse, and the Honor Council will not consider it.

Title IX

At Rice University, unlawful discrimination in any form, including sexual misconduct, is prohibited under Rice Policy on Harassment and Sexual Harassment (Policy 830) and the Student Code of Conduct.

Please be aware that all employees of Rice University are "mandatory reporters," which means that if you tell me about a situation involving sexual harassment, sexual assault, dating violence, domestic violence, or stalking, I must share that information with the Title IX Coordinator.

Although I have to make that notification, you will control how your case will be handled, including whether or not you wish to pursue a formal complaint. The goal is to make sure you are aware of the range of options available to you and have access to the resources you need.

To report sexual harassment, please contact the Title IX Coordinator at titleix@rice.edu. To explore supportive measures and other resources that are available to you, please visit the Office if Interpersonal Misconduct Prevention and Support at https://safe.rice.edu.

Accommodations

If you have a documented disability that may affect academic performance, you should: 1) make sure this documentation is on file with Disability Resource Center (Allen Center, Room 111 / adarice@rice.edu / x5841) to determine the accommodations you need; and 2) let me know/discuss with me your accommodation needs as appropriate.

Additionally, even if you do not have a documented disability, but would benefit from some accommodation, you can let me know either by email or by the anonymous feedback form, and I will do my best to fulfil any reasonable request.

In any case, please let me know of any accomodation you may need as far in advance as possible.